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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,504	03/31/2004	Satoru Wakao	1232-5362	8217

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EXAMINER	
AZARIAN, SEYED H	

ART UNIT	PAPER NUMBER
2624	

NOTIFICATION DATE	DELIVERY MODE
07/15/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/815,504	WAKAO, SATORU	
	Examiner	Art Unit	
	Seyed Azarian	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-8,10-14 and 19-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-8,10-14 and 19-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *3/31/2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

RESPONSE TO AMENDMENT

1. Applicants' amendment filed, 4/4/2008, see page 8 through page 11, of remark, with respect to cancellation of claims 2, 9 and 15-18 and amended claims 1, 3, 8 and 21, have been fully considered but they are moot in view of the new ground (s) of rejection as necessitated by applicant's amendment is made.

Contrary to the applicant's assertion, regarding claims 1 and 3, that Friedman and Takanashi references either taken individually or in combination do not teach or suggest, " the control unit avoids displaying additional information and notification indicating whether a digital image is altered or not".

In response to applicant's argument, limitations in the amended claims 1 and 3, Examiner would like to point out that rejections are based on combination of references, where Friedman discloses, (column 4, line 55 through column 5, line 14, additional information, also column 5, lines 54-65, "viewing the captured image for authentication" (display), and further column 6, lines Fig. 3C, the authentication system calculates its own image file hash using a hash calculator, comprising a comparator receives the image hash from the hash calculator and the secure image hash from the decryptor. If these two hashes match, it is certain to any required degree that the digital image in question is indeed identical to what the digital camera system originally produced. If, on the other hand, even one single bit in the image being authenticated has been "altered", the two hashes will not even closely match and the image's authenticity will be "indicated" (notification) as not being affirmed by an authenticity output signal A; otherwise the comparator will indicate authenticity by an output signal A).

Further more Takanashi in the same field of authentication and verification teaches (column 3, lines 30-56, information display means which displays information; and display control means effects deleting images (avoids displaying), other than the selected (authenticity) one image and collateral information of the images, to thereby allow enhancement of the selected one image, and the display control means display the collateral information of the selected one image in the "deleted" region, also Fig. 9 and 10, column 12, line 55 through column 13, line 22, image 204 including images of four frames (refer to thumbnail), a enclosing line 212 (enhancement) which shows an image corresponding to the image of the one frame of the print preview image is displayed. The enclosing line 212 allows the operator to easily understand which image of the test image 204 the one frame of the print preview image 206 corresponds to. Next, a display of an image plane during the test operation will be described in detail with reference to FIG. 10).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Friedman invention according to the teaching of Takanashi because combination of Friedman and Takanashi provides display control means allows automatically deleting (not displaying) additional information, including thumbnails in as image that is not verified as being unaltered, which can easily be implemented to a verification device.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.3218 may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 3-14 and 19-27, rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12, of U.S. Patent No. 7,298,932. Each of the limitation set forth in the claims of the instant application is defined in the claims of the patent.

As an example consider claim 1, of current application, compared to claim 2, of U.S. Patent No. 7,298,932 discloses, a control apparatus which controls an image sensing apparatus, comprising: a determination unit which determines whether or not verification data has been added to an image file, wherein the verification data is used to determine whether or not a digital image in the image file has been altered; a command generating unit which generates a command that requests the image sensing apparatus to change the contents of the image file; and a command sending unit which sends the command to the image sensing apparatus if said determination unit determines that the verification data has not been added to the image file whereas the command is not sent to the image sensing apparatus if said determination unit determines that the verification data has been added to the image file. The control apparatus according to claim 1, wherein said control apparatus displays a message indicating that the

contents of the image file cannot be changed, if said determination unit determines that the verification data has been added to the image file (column 16, line 56 through column 17, line5).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 3-8, 10-14 and 19-27, are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedman (U.S. patent 5,499,294) in view of Takanashi Teruo (U.S. patent 6,330,051).

Regarding claim 1, Friedman discloses an image verification apparatus comprising (column 4, lines 19-29, the invention is to provide a solution to the problem of authenticating digital image files for verification);

verification unit which verifies whether an image file has been altered (column 6, lines 31-52, digital processing system programmed with same hashing algorithm used in digital camera and a secure image hash using a decryptor 22 comprising a digital processing system with public key as a second input to decrypt the digital signature. A comparator receives the image hash from the decryptor for matching. If the single bit in the image being authenticated has been altered, the two hashes will not even closely match the image's authenticity will be indicated as not being affirmed by an authenticity output signal).

Friedman discloses (column 4, line 55 through column 5, line 14, additional information, also column 5, lines 54-65, "viewing the captured image for authentication" (display), and further column 6, lines 31-51, Fig. 3C, the authentication system calculates its own image file hash using a hash calculator, comprising a comparator receives the image hash from the hash calculator and the secure image hash from the decryptor. If these two hashes match, it is certain to any required degree that the digital image in question is indeed identical to what the digital camera system originally produced. If, on the other hand, even one single bit in the image being authenticated has been "altered", the two hashes will not even closely match and the image's authenticity will be "indicated" (notification) as not being affirmed by an authenticity output signal A; otherwise the comparator will indicate authenticity by an output signal A). But does not explicitly state its corresponding "display the additional information (thumbnail image) if verification unit verifies that the image has been altered". On the other hand Takanashi in the same field of authentication and verification teaches (column 3, lines 30-56, information display means which displays information; and display control means effects "deleting images (avoids displaying)" other than the selected (authenticity) one image and collateral information of the images, to thereby allow enhancement of the selected one image, and the display control means display the collateral information of the selected one image in the "deleted" region, also Fig. 9 and 10, column 12, line 55 through column 13, line 22, image 204 including images of four frames (refer to thumbnail), a enclosing line 212 (enhancement) which shows an image corresponding to the image of the one frame of the print preview image 206 is displayed. The enclosing line 212 allows the operator to easily understand which image of the test image 204 the

one frame of the print preview image 206 corresponds to. Next, a display of an image plane during the test operation will be described in detail with reference to FIG. 10).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Friedman invention according to the teaching of Takanashi because combination of Friedman and Takanashi provides display control means allows automatically deleting (not displaying) additional information, including thumbnails in as image that is not verified as being unaltered, which can easily be implemented to a verification device.

Regarding claim 3, Friedman discloses the apparatus according to claim 1, wherein said control unit displays information indicating that digital image has been altered, if said verification unit verifies that the digital image has been altered (see claim 1, also see abstract, the digital camera for calculating a hash of the image file using predetermined algorithm, and column 6, lines 2-30, also column 7, line 58 through column 8, line 25, finally all valid public keys is desirable to defeat a counterfeiter, would result in the declaration by the comparator of mismatch between the secure image hash from the decryptor).

Regarding claim 4, Friedman discloses the image verification apparatus according to claim 1, wherein the additional information includes information relating to the image file (see claim 1, also column 7, lines 18-45, and containing information).

Regarding claim 5, Friedman discloses the image verification apparatus according to claim 1, wherein the additional information includes information relating to an apparatus, which has generated the image; file (see claim 1, also column 6, lines 2-11, generating image file and storing on a medium in camera system).

Regarding claim 6, Friedman discloses the image verification apparatus according to claim 1, wherein said verification unit verifies whether the digital image has been altered, using a common key of common key cryptography (column 7, lines 6-16, public key cryptography).

Regarding claim 7, Friedman discloses the image verification apparatus according to claim 1, wherein said verification unit verifies whether the digital image has been altered, using a public key of public key cryptography (column 7, lines 18-45, verification for alteration).

Regarding claim 21, Friedman discloses a computer-readable medium that stores a program causing a computer to performed a method of displaying additional information (see claim 1, also column 8, line 46 through column 9, line7, as one buffer is filled with a block of data, another block of data in a second buffer is hashed and encrypted and a third block of data is recorded in a third buffer at a faster clock rate so that its algorithms are complete in the second buffer in time to transfer the digital signature in a third buffer to a camera bulk storage medium before a multiplexer shifts functions among the set of three buffers for the next block of data. Thus, with a set of three buffers A, B and C, assume A is receiving an image block, B is hashing and encrypting a previous block, and C is transferring an encrypted block into the camera bulk storage medium. During the next block interval, the functions are switched A to B, B to C and C to A, and during the third block interval the functions are again switched B to C, C to A, and A to B. The following block interval commences a new multiplexing cycle. In that manner, real-time recording in the camera bulk storage medium is delayed by only three block intervals).

With regard to claims 8 and 10-14, the arguments analogous to those presented above for claims 1, 2, 3, 4, 5, 6 and 7 are respectively applicable to claims 8 and 10--14.

With regard to claims 19-20 and 22-27, the arguments analogous to those presented above for claims 1, 2, 3, 4, 5, 6 and 7 are respectively applicable to claims 19-20 and 22-27.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (571) 272-7443. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehta Bhavesh, can be reached at (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR.
Status information about the PAIR system, see http:// pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Seyed Azarian/
Primary Examiner, Art Unit 2624
Group Art Unit 2624
June 28, 2008

Application Number	Application/Control No.	Applicant(s)/Patent under Reexamination	
	10/815,504	WAKAO, SATORU	
	Examiner	Art Unit	
	Seyed Azarian	2624	